

# PATENT ABSTRACTS OF JAPAN

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(54) WASHER

(57)Abstract:

**PURPOSE:** To realize a washer for semiconductor substrates, capable of easily removing the electrification of static electricity to generate at the time of washing, by a method wherein introducing ports for ionized gas are provided with a washing vessel and the foam of the ionized gas is introduced in washing solution in such a figure as to come in contact to the semiconductor substrates.

**CONSTITUTION:** Semiconductor substrates 103, on each surface of which an insulating oxidized substance, etc., have been formed, are dipped in a washing vessel 102 filled up with such washing solution 101 as pure water, chemicals, etc., being leaned against the supporting stand 104 of the semiconductor substrates

103. After that, the washing water 101 is introduced in from a washing solution introducing port 105. Ionized gas is made to generate by impressing high voltage on two opposed electrodes 109 installed on the outer periphery part of a gas introduction piping 108 provided at the lower part of the washing vessel 102 through a high voltage source 110. As gas to ionize is used gaseous gas such as nitrogen, oxygen, argon, etc. The gaseous gas is introduced in through a gaseous gas introducing port 111. Ionized gas passes through ionized gas introducing paths 112 branched under the washing vessel and is uniformly introduced in the washing vessel 102 from ionized gas introducing ports 113. By the introduction of this gas, the electrification of static electricity is removed, and furthermore, washing effect is enhanced.

